



Civil Engineering

Vision: “To impart quality technical education beneficial to industry and the society in the field of Civil Engineering.”.

- **Mission:** • To arrange academic and technical expertise.
 - To improve the practical knowledge of the student as per current scenario of industry.
 - To make the students socially and ethically responsible.

Assignment No :- 01

Date :- July 17, 2025 (Thu)

Topic Name :- Cement

1. State Bougue’s compounds with their effect on properties of cement.
2. Explain the step by step procedure of standard consistency test on cement.
3. Define hydration. Explain in brief heat of hydration of cement.
4. Name any four types of cement and state their uses.
5. State the effect of storage of cement on its strength. State four precautions while storing the cement.
6. Explain the step by step procedure of initial & final setting time of cement.
7. List four physical properties of OPC. Explain how fineness of cement is determined by method of sieving

Date of Submission :- July 24, 2025 (Thu)

Assign By :- Mr. Shashikant Hegonde



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Assignment No :- 02

Date :- August 7, 2025 (Thu)

Topic Name :- Aggregate

1. Explain the Bulking of sand. State the effect of bulking of sand on concrete.
2. State any four properties of coarse aggregate & explain it.
3. Explain the qualities of good aggregate.
4. What are the impurities in aggregate? In what way, they affect concrete?.
5. Define Flakiness index and Elongation index.
6. Illustrate the procedure to determine impact value of coarse aggregate
7. Explain silt content test?
8. Sieve analysis was conducted on 3000gm of fine aggregate and following observations were recorded. Find fineness modulus of sample.

Seive size (mm)	4.75	2.36	1.18	0.6	0.30	0.15	0.075	pan
Weight of FA retained (gm)	150	235	830	725	515	298	142	105

Date of Submission :- : August 14, 2025 (Thu)

Assign By :- Mr. Shashikant Hegonde



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Assignment No :- 03

Date :- September 18, 2025

Topic Name :- Concrete & Its Testing

1. Explain the importance of water / cement ratio in the concrete mix
 2. Illustrate step wise procedure of compaction factor test with sketch
 3. Explain the procedure for determining the workability of fresh concrete using a slump cone
 4. State Duff Abraham's water cement ratio law
 5. Define concrete mix design. Write four objectives of concrete mix design
 6. Explain the necessity of supervision for concreting operations. (any four)
 7. State any four objectives of mix design
 8. Define workability and state different factors affecting workability
 9. Explain step by step procedure of concrete mix design as per IS 10262-2009
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Date of Submission :- September 25, 2025 (Thu)

Assign By :- Mr. Shashikant Hegonde



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Assignment No :- 04

Date :- : October 6, 2025

Topic Name :- Quality control of Concrete

1. Enlist various operations in concreting in sequence
 2. Enlist any two methods of transportation of concrete
 3. State the stripping time of form work as per IS-456-2000 i) Beam ii) Column ii) slab
 4. Explain two causes of each: i) Segregation ii) Bleeding of concrete
 5. Differentiate between segregation and bleeding
 6. State four precautions to be taken during placing of concrete
 7. State any four requirement of good form work and draw labeled sketch of form work for:
i) Column ii) Beam iii) Slab
 8. Suggest the relevant method of transportation of concrete used for construction in following situation: (1) Concreting in hilly areas (2) Concreting of high rise building (3) Concreting under water
 9. Suggest the relevant type of vibrator to be used for following constructions: (1) Road pavement slab (2) Prefabricated RCC member (3) Precast columns
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Date of Submission :- October 13, 2025 (Monday)

Assign By :- Mr. Shashikant Hegonde



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Assignment No :- 05

Date :- October 16, 2025

Topic Name :- admixture in concrete and special concrete

1. List four methods of water proofing
2. Define: Admixture
3. State any two purposes of using admixture in concrete
4. Explain Ready Mix Concrete. Write two uses of RMC
5. Write the precautions to be taken while transporting concrete on site
6. State the limitations of ready mix concrete
7. Explain the limitation of light weight concrete
8. Write any four properties of high strength concrete.
9. Describe the High performance concrete
10. Explain Fiber Reinforced Concrete.
11. State the properties of fiber reinforced concrete
12. Compare accelerating Admixture & Retarding Admixture
13. List the special concrete



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Assignment No :- 05

Date :- October 16, 2025

Topic Name :- admixture in concrete and special concrete

14.State the properties of accelerating admixture

15.What are super plasticizer ? state the properties & uses of super plasticizer

Date of Submission :- October 23, 2025 (Thursday)

Assign By :- Mr. Shashikant Hegonde